

LAPIDOVSKIY, K.M., inzh.

Conference of the Institute of Farm Mechanization and Electrification of the Academy of Agricultural Sciences of the White Russian S.S.R. Gidr. i mel. 12 no.11:57-60 N '60. (MIRA 14:1)  
(Drainage—Congresses) (Water-supply, Rural—Congresses)

LAPIDOVSKIY, K.M., inzh.

Conference on problems in the development of land reclamation in  
the northwestern zone of the R.S.F.S.R. Gidr. i mel. 13 no.6:59-62  
Je '61. (MIRA 14:6)

(Russia, Northwestern--Drainage)

STUDENICHNIK, B.I.; LAPIDOVSKIY, K.M., nauchn. red.

[Securing and methods for controlling riverbed deformations] Razvivaushchaya sposobnost' potoka i metody ruslovykh raschetov. Moskva, Stroiizdat, 1964. 182 p.  
(MIRA 17:7)

LAPIDOVSKIY, I.M., inzh.

All-Union seminar on the generalization of the practices in  
the productive use of drained lands. Gidr. i mel. 16 no.11:  
57-59 N '64 (MIRA 18:2)

1. Goszemvodkhoz SSR.

**LAPIDOVSKIY, K.V., inzhener.**

Activities of the Scientific-Technical Council of the Ministry of  
Agriculture of the U.S.S.R. Gidr. 1 mel. 6 no.8:63-64 '54.  
(Agricultural engineering) (MLRA 7:9)

LAPIDUS, A.A.

Wear of plastic guides of machine tools. Stan i inst. 35  
no.12:17-22 D '64 (MIRA 18:2)

L 15483-63

EWI(j)/EPF(c)/EWT(m)/BDS Pc-4/Pr-4 RH/WW/AB

ACCESSION NR: AP3005449

S/0204/63/003/004/0523/0530

AUTHORS: Krivoruchko, O. P.; Lapidus, A. L.; Samoylenko, Ye. A.; Yanovskiy, M. I.

TITLE: Production of acetylenic concentrates from the gaseous products obtained from electrocracking of liquid hydrocarbons by thermal displacement

SOURCE: Neftekhimiya, v. 3, no. 4, 1963, 523-530

TOPIC TAGS: acetylenic concentrate, liquid hydrocarbon electrocracking, electrocracking, He, teflon, helium, adipic acid

ABSTRACT: The gaseous products formed during electrocracking of liquid hydrocarbons contain products which are both heavier and lighter than acetylene. Based on this fact, it was assumed that it would be possible to obtain acetylene of higher purity by using the method of thermal displacement. An apparatus was constructed for this purpose which permits the study of the mechanism of the adsorption separation process of gaseous hydrocarbons by the stated

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ACCESSION NR: AP3005449

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method. The apparatus consists of a stainless steel column with 15 sections. Each section is 120 mm long and 15 mm inside diameter. These sections are connected by teflon fittings. The optimum conditions for the thermal displacement separation were obtained with a model mixture of  $C_3H_8 + C_3H_6$ . The carrier gas in this study was helium with a flow rate of 15 to 30 ml/min. The analysis of propane-propylene mixture was performed either by silicagel adsorption or by gas-liquid chromatography on an 8-meter column filled with INZ60D stationary phase and 20% by wt. of adipic acid dinitrile liquid phase. This study shows the possibility of obtaining acetylene concentrates from gaseous products from electrocracking of liquid hydrocarbons. Orig. art. has: 2 tables, and 7 figures.

ASSOCIATION: Moskovskiy institute tonkoy khimicheskoy tekhnologii im. N. V. Lomonosova (Moscow institute of fine chemical technology); Institut khimicheskoy fiziki, AN SSSR (Institute of chemical physics, AN SSSR)

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OTHER: 000

Card 2/2



LAPIDUS, A. S.

29070-Za Povysheniye Dolgovechnosti Stankov! Stanki i Instrument, 1949, No. 8, s. 1-4

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

LAPIDUS, A. S. I RESHETOV, D. N.

*machine*  
*INCREASE durability*

1. LAPIDUS, A.S.
2. USSR (600)
4. Technology
7. Data on wear and tear and methods of increasing the life service of the lead screws of screwcutting lathes. Moskva, TsBti, 1952
9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

LAPIDUS, A.S.; RESHETOV, D.N.

Selecting the material and design of carriage guides, and methods of  
prolonging their life. Stan.i instr. 24 no.11:4-11 N '53. (MIRA 6:12)  
(Machine tools--Design)

LAFIDIS, A. S.

"Investigation of the Gear of the Parts of Machines in Operation--the Wires, the Gears, and Gears." 3rd Tech Sci, Moscow Machine Tool and Tool Inst under I. V. Stalin, 24 Feb 54. Dissertation (Vychisluyaya Kona... Moscow, 12 Feb 54)

SO: SUM 180, 19 Aug 1954

LAPIDUS, A.S.

Plastic coated guides for machine tools; to be continued. Stan.  
1 instr. 26 no.11:7-12 H '55. (MLRA 9:2)  
(Machine tools)

LAPIDUS, A.S.

Plastic coated guides for machine tools. (Conclusion)  
Stan.1 instr.26 no.12:8-14 D '55. (MIRA 9:2)  
(Machine tools)

LAPIDUS, A.S.

Methods for increasing the durability of gear wheels in universal  
machine tools. Stan.1 instr. 27 no.10:8-10 0 '56. (MLRA 9:12)  
(Gearing)

*LAPIDUS, A.S.*

PHASE I BOOK EXPLOITATION 188

Eksperimental'nyy nauchno-issledovatel'skiy institut  
metallorazhreshchikh stankov

Modernizatsiya tokarno-revol'vernykh stankov; rukovodyashchiye  
materialy (Modernization of Turret Lathes; Instructions)  
Moscow, Mashgiz, 1957. 170 p. 8,500 copies printed.

AUTHORS: Likht, L.O., Kudinov, V.A., Lapidus, A.S., Azarevich,  
G.M., Skidal'skiy, M.M., Vedernikov, A.I.; Ed.: Prokopovich,  
A.Ye.; Ed. of Publishing House: Balandin, A.F.; Tech. Ed.:  
El'kind, V.D. Managing Ed. for literature on metalworking  
and tool making [Mashgiz] Beyzel'man, R.D., Engineer.

PURPOSE: The book is intended for engineering and technical  
personnel in machine-building plants.

COVERAGE: The book presents an analysis of the existing stock  
of turret lathes and outlines basic trends in their modernization.  
The following data are included: examples for calculating the  
main drive and feeds; classification and description of devices  
for mechanization and automation; description of various devices

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Modernization of Turret Lathes; Instructions 188

for expanding the technological potentialities of machine tools and examples of the modernization of basic machine tools in that category. Problems of increasing vibration stability and the reliability of machine-tool operation are discussed. The share of turret lathes in the Soviet stock of machine tools was 3.7 percent in 1940, 5.7 percent in 1945, 5.0 percent in 1950, and 4.3 percent in 1955. Most of the lathes in use at present were produced during the thirties and forties. As of 1955, there were about 75,000 turret lathes in the Soviet stock of machine tools. Only 2.2 percent of these could machine a piece part up to 80 mm. in diameter, 29.4 percent could machine a piece part up to 65 mm. in diameter, 41.5 percent could machine a piece part up to 40 mm. in diameter, and 16.8 percent could machine a piece part up to 18 mm. in diameter. There are 44 Soviet references. No personalities are mentioned.

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VK/ksv  
7-18-58

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LAPIDUS, A.S.

PHASE I BOOK EXPLOITATION 1187

Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov

Modernizatsiya strogal'nykh, dolbezhnykh i protyazhnykh stankov; rukovodyashchiye materialy (Modernization of Planing, Shaping, Slotting, and Broaching Machines; Instructions) Moscow, Mashgiz, 1957. 178 p. 8,500 copies printed.

Authors: Boltukhin, A.K., Morozov, I.I., Kudinov, V.A., Lapidus, A.S., Belov, V.S., Manuylov, L.K., Mushtayev, A.F., Engineers; Ed.: Prokopovich, A.Ye.; Ed. of Publishing House: Shemshurina, Ye.A.; Tech. Ed.: Matveyeva, Ye.N.; Managing Ed. for Literature on Metal Working and Tool Making (Mashgiz): Beyzel'man, R.D., Engineer.

PURPOSE: The book is intended for production engineers and machinists in metal cutting shops.

COVERAGE: The book presents instructions on modernization of planers, shapers, slotters, horizontal broaching machines, and vertical broaching machines for internal and external broaching. A brief review and analysis of the operation of these machine tools is

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Modernization of Planing (Cont.)

1187

given and also the basic and most expedient methods of modernizing them. Examples of design and modernization of the speed drive and of the feed drive, measures for raising the level of mechanization and automation of machine tools are discussed and devices are shown for widening the applicability range of machines and for performing various operations not pertaining to those usually done on these machine tools. The problems of increasing rigidity, resistance to vibrations and the life of these machine tools is discussed. Drawings of basic units of standard plans for modernization of tools as worked out by TsKB Remashtrest (Central Design Bureau of the Trust for the Repair of Metal-cutting Machines) and engineering departments of machine-tool building plants are presented in detail. No personalities are mentioned. There are 16 references, all Soviet.

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4. Standard design for modernization of models 7510 and  
7520 horizontal-type broaching machines 166

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AVAILABLE: Library of Congress (TJ1205.M6)

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2-25-59

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LAPIDUS, A. S.

BOLFUKHIN, A.K.; STERLIN, S.Z.; MUSHTAYEV, A.F.; MOROZOV, I.I.; KUDINOV, V.A.;  
MONAKHOV, G.A.; AZAREVICH, G.M.; LAPIDUS, A.S.; PROKOPOVICH, A.Ye.,  
redaktor; RZHAVINSKIY, V.V., redaktor izdatel'stva; TIKHANOV, A.Ya.,  
tekhnicheskiy redaktor

[Modernization of knee and column type milling machines; instructions]  
Modernizatsiya konsol'no-frezernykh stankov; rukovodiashchie materialy.  
Pod red. A.E.Prokopovicha. Moskva, Gos. nauchno-tekhn.izd-vo mashino-  
stroit.lit-ry, 1957. 194 p.  
(MLRA 10:8)

1. Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut  
metallorazhreshchikh stankov  
(Milling machines)

LAPI Dots, A.S.

ANTOSHIN, Ye.V.

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PLANE I BOOK EXPLORATION

007/1963

Справочник механика машиностроительного завода 7 дробь tenth.  
 1. 2. Технология ремонта (Handbook for Mechanics of Machine-Building  
 Plants in Two Volumes, Vol. 2: Technology of Repair Operations) Moscow,  
 Mashgiz, 1958. VII, 1959 p. 30,000 copies printed.

Баш. М.: Инж. Эксперт, Эксперт; М.: Е.О. Попов, Эксперт; Тех. М.:  
 Т.П. Соловьев; М.: Инж. Эксперт, Эксперт; А.П. Владимиров,  
 Доктор of Technical Sciences, and A.A. Kozlov, Candidate of Technical Sciences;  
 Managing Ed. for Reference Literature (Mashgiz): V.I. Rylov, Engineer.

REMARKS: This handbook is intended for personnel responsible for repair and main-  
 tenance operations in a machinery-manufacturing plant.

COVERAGE: The handbook contains information pertinent to the organization of  
 repair and maintenance operations, design-preparation of maintenance work, and  
 economics of maintenance. Information on scientific research organizations and  
 plants participating in preparation of this volume is included in the coverage  
 of Volume 1 (007/1959). The handbook contains no references. Basic topics covered include  
 reconditioning and making of parts; maintenance operations; metal-working,  
 heating, and pipe-fitting; finishing operations; maintenance of metal-working  
 equipment; and maintenance of foundations.

Subjects: Maintenance of metal powders (Sokolinskiy, V.Y., Engineer)

Use of metal powders in maintenance of equipment

Use of metal powders in maintenance of equipment

Technology of manufacturing parts from metal powders

Use and manufacture of nonmetallic parts and products in maintenance

Parts made from plastic laminated wood (Bash, M.A., Engineer)

Plastic overlaid ways (Lapins, A.G., Candidate of Technical Sciences)

Rolling members, friction discs, and rubberized belts

(Rubin, E. B., Engineer; and Yevlitskiy, A.M., Engineer)

Protective rubber coatings (Morison, T. S., Engineer)

Ch. II. Metalworking, Heating and Pipe-fitting Operations in

Maintenance of Equipment

Brush work assembly tools (Afonse, Yev, I.A., Engineer)

Brush work tools

Mechanist's hammers

Chisels and edge chisels

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PHASE I BOOK EXPLOITATION

SOV/1352

Kashepava, M. Ya., Ye. I. Terekhina, V.A. Kudinov, A.S. Lapidus, and G.M. Azarevich

Modernizatsiya universal'nykh gorizontal'no-rastochnykh stankov; rukovodyashchiye materialy (Modernization of Universal Horizontal Boring Machines; Instructions) Moscow, Mashgiz, 1958. 247 p. 7,000 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov.

Ed.: A. Ye. Prokopovich; Ed. of Publishing House: Ye. A. Shemshurina; Tech. Ed.: V.D. El'kind; Managing Ed. for Literature on Metalworking and Toolmaking (Mashgiz): R.D. Beyzel'man, Engineer.

PURPOSE: This book is intended for mechanics and designers

Card 1/10

Modernization of Universal (Cont.)

SOV/1352

engaged in modernization of metal-cutting machine tools.

COVERAGE: The book briefly describes both modern universal horizontal boring machines and those of obsolete design which predominate in existing Soviet machine tool stocks. It analyzes the utilization of these machine tools in order to formulate basic modernization requirements. The book also presents ENIMS recommendations and specific design solutions for increasing the speeds, power, feeds, precision, rigidity, vibration stability, and durability of existing horizontal boring machines. Emphasis is placed on reducing support time by increasing the level of mechanization and facilitating the task of the machine tool operator. No personalities are mentioned. There are 62 references, of which 54 are Soviet, 4 German and 4 English.

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LAPIDUS, A.S.

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1136

Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhu-shchikh stankov

Modernizatsiya tokarno-karusel'nykh stankov (Modernization of Vertical Turning Lathes) Moscow, Mashgiz, 1958. 265 p. 6,000 copies printed.

Authors: Gladkov, B.A., Grachev, L.N., Levit, G.A., Lapidus, A.S., Leshchenko, Yu.A., and Kudinov, V.A.; Ed.: Prokopovich, A.Ye.; Ed. of Publishing House: Ivanova, I.A.; Tech. Ed.: Tikhanov, A.Ya.; Managing Ed. for Literature on Metal Working and Tool Making (Mashgiz): Beyzel'man, R.D., Engineer.

PURPOSE: This book is intended for production personnel employing machine tool equipment, for designers of engineering departments, engineers and technicians.

COVERAGE: Vertical turning lathes in an actual operation are reviewed and basic trends and methods of modernizing them are discussed. Design examples and solutions of various design problems in

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Modernization of Vertical (Cont.)

1136

modernizing the main drive, feed drives, table rests, and spindles are presented, and various devices for reducing the auxiliary operation time and increasing the versatility of operations are described. The problems of vibration stability of machines and safety measures are also discussed. No personalities are mentioned. There are 69 references, 66 of which are Soviet and 3 English.

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PHASE I BOOK EXPLOITATION

SOV/1687

Gladkov, B. A., L.N. Grachev, P.M. Shpigel'shteyn, V.A. Kudinov,  
A.S. Lapidus, G.M. Azarevich, Yu. A. Leshchenko

Modernizatsiya tokarnykh stankov; rukovodyashchiye materialy  
(Modernization of Lathes; Instructions) Moscow, Mashgiz, 1958.  
286 p. 6,800 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy  
institut metallorezhushchikh stankov.

Ed.: A.Ye. Prokopovich; Ed. of Publishing House: N.A. Ivanova;  
Tech. Ed.: Ye. N. Matveyeva; Managing Ed. for Literature on  
Metal Working and Tool Making: R.D. Beyzel'man, Engineer.

PURPOSE: This book is intended for manufacturing personnel dealing  
with the operation of machine tools, and for designers in plant  
machine-shops, and engineer-technologists.

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LAPIDUS, A.S.

ABRAMOVICH, I.I., prof., ANBINDER, A.G., inzh., ANTOSHIN, Ye.V., inzh.,  
 ARKHANGEL'SKIY, L.A., inzh., ASTAF'YEV, S.S., kand. tekhn. nauk,  
 AFANAS'YEV, L.A., inzh., BARGSETEYN, I.I., inzh., BORISOV, Yu. S.,  
 inzh., red., BYALYY, I.L., inzh., VERVITSKIY, A.M., inzh., GERSHMAN,  
 D.Kh., inzh., GINZBURG, Z.M., inzh., GOROSHKIN, A.K., inzh.,  
 YEVDOKIMCHIK, Kh.I., inzh., ZHIKH, V.A., kand. tekhn. nauk,  
 ZABYVAYEV, Ye. I., kand. tekhn. nauk, [deceased], ZOBIN, V.S., inzh.,  
 IVANOV, G.P., kand. tekhn. nauk, KAPRANOV, P.N., inzh., KONDRATOVICH,  
 V.M., inzh., KOSTEREV, S.K., inzh., KOVAL'SKIY, N.N., inzh., KRUGLYAK,  
 L.A., inzh., LUKYANOV, T.P., inzh., LAPIDUS, A.S., kand. tekhn. nauk,  
 LIVSHITS, G.A., kand. tekhn. nauk, LISHANSKIY, I.M., inzh., MIGALINA,  
 Ye.Ya., inzh., NOSKIN, R.A., kand. tekhn. nauk; ., PRONIKOV, A.S.,  
 doktor tekhn. nauk, REGIER, Z.L., kand. tekhn. nauk, RUDYK, M.A.,  
 inzh., SOKOLOVA, N.V., inzh., SAKLINSKIY, V.V., inzh., SAKHAROV, V.P.,  
 inzh., TOKAR', M.Kh., inzh., TKACHEVSKIY, G.I., inzh., KHRUNICHEV,  
 Yu.A., kand. tekhn. nauk, TSOPIN, K.G., inzh., red.; SHEINGOL'D, Ye. M.,  
 inzh., SOKOLOVA, T.F., tekhn. red.

[Handbook for machinists of machinery plants in two volumes] Spravochnik  
 mekhanika mashinostroit'nogo zavoda v dvukh tomakh. Moskva, Gos.  
 nauchno-tekhn. izd-vo mashinostroit. lit-ry. Vol. 2. [The technology  
 of repair work] Tekhnologiya remonta. Otv. red. toma IV. S. Borisov,  
 1958. 1059 p. (MIRA 11:10)

(Machinery--Maintenance and repair)  
 (Machine-shop practice)

LEVIT, G.A.; TSYRLIN, M.M.; LAPIDUS, A.S.

Lubricants and lubrication systems for face-plate supports of  
heavy-duty vertical boring and turning machines. Stan.1 instr.

29 no.5:28-34 My '58.

(MIRA 11:7)

(Metalworking lubricants)

S/121/59/000/12/003/003

AUTHORS: Mayorova, E.A., Lapidus, A.S.

TITLE: Thinly Laminated Glue-on Plastic Guides

PERIODICAL: Stanki i Instrument, 1959, No 12, pp 23 - 25

TEXT: The authors state that plastic guides for heavy machinery hitherto were made with a thickness of 10 mm and were fastened by screws or pins. The use of glue-on type plastic guide strips makes it possible to reduce this thickness, and the authors recommend for machine tools of medium size a thickness of plastic guide strips of 2 - 4 mm, and for heavy machines a thickness of 3 - 5 mm. The material recommended is the PT grade textolite (or PT-1), although at present industrial tests with thinly laminated guides made of cord caprone and 68-polyamide are carried out. Compared with thick plastic guide strips, the thinner ones have the following advantages: 1) the consumption of deficient plastics is greatly reduced (by 2 - 4 times); 2) labor-consumption in the manufacture of plastic guides decreases; 3) layer deformations of the plastic material are considerably reduced, which ensures a high stability of the plastic layer; 4) the rigidity of machine body parts is somewhat in-

Card 1/2

Thinly Laminated Glue-on Plastic Guides

S/121/59/000/12/003/003

creased, which is important for tables and slides, generally not rigid enough. The authors emphasize the great importance of selecting the proper glue, which must possess a high shearing strength, warrant an increased impact strength of the glue seam and have a high resistance to mineral oils, organic solvents, aqueous coolants, high relative air moisture and temperatures in the range of 80 - 100°C. The authors cite the results of investigations which were carried out at the ENIMS (Experimental Scientific Research Institute of Metal Cutting Machine Tools) in order to test the properties of various glue compounds, among others the epoxide resin glues ED-5, ED-6 and the K-168 compound. The holding power of the glues was tested for the following materials: cast iron with steel textolite, polyamides, vinyl plastics, cord fibres, Br.OTsS 6-6-3 grade bronze, TsAM 10-5 grade zinc alloy, and L62 grade brass. The results of these tests are cited in the Tables 1, 2 and 3. Based on the investigations carried out by the ENIMS, instructions for the glueing of plastic guide strips were worked out which, since 1957, were subjected to extensive checks in machine tool plants and machine building factories. Three diagrams, 3 tables.

Card 2/2

LAPIDUS, A.S.

Deformations of machine-tool tables arising in operation. Stan.1  
instr. 32 no.7:22-24 J1 '61. (MIRA 14:6)  
(Machine tools)



LAPIDUS, A.S., inzh.; ALIPOV, N.Ye., inzh.

Radiation-convection heaters. Khim.nash. no.2:3-5 Mr '62.  
(Radiant heating) (MIRA 15:3)

LAPIDUS, A.S.

Hardening in obtaining acetylene from hydrocarbon raw materials.  
Neftaper. 1 neftekhim. no. 11:31-35 '63. (MIRA 17:5)

1. Gosudarstvennyy institut azotnoy promyshlennosti.

LAPIDUS, A.S.

Technology of safety during the use of torches for the combustion  
of explosive and harmful gaseous wastes in the chemical industry.  
Zhur.VKHO 9 no. 3:299-305 '64. (MIRA 17:9)

L 18332-65 Pb-4/Pa-4 AEDC(a)/AMD

ACCESSION NR: AP5003111

S/0063/64/009/003/0299/0305

AUTHOR: Lapidus, A. S. B

TITLE: Safety techniques in using burners to burn off explosives and harmful gas discharges in the chemical industry

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 9, no. 3, 1964, 299-305

TOPIC TAGS: toxicology, chemical industry, gas, air pollution, waste disposal

Abstract: The content of toxic matter in the atmosphere is regulated by sanitary standards and their maximum permissible concentration in the air of populated places must be 1/10 - 1/20 that of the concentration in the air of industrial locations. Discharges of even minute amounts of toxic gases produce intolerable sanitary conditions. To eliminate this phenomenon, combustion of discharged flammable gases with burners is often resorted to. Usually hydrocarbon-containing gases containing admixtures of hydrogen, hydrogen sulfide, etc. are burned. Strict requirements are set for the burner installations with respect to completeness of combustion and assurance of safe and reliable performance when dealing with fire- and explosion-hazardous chemical production lines. These conditions are achieved by:  
1) burner design, assuring complete combustion of the gas without soot or

Card 1/2

L 18382-65

ACCESSION NR: AP5003111

smoke formation; 2) stable performance of the burner when the amount and composition of the burned gas is varied within relatively broad limits. Orig. art. has 5 equations, 2 tables, and 5 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: GO, LS

NO REF SOV: 007

OTHER: 009

JPRS

Card 2/2

LAPIDUS, A.S.; MAYOROVA, E.A.

Superimposed capron guides for machine tools. Stan. i instr.  
36 no.10:19-23 0 '65. (MIRA 18:11)

L 41157-65 EWT(m)/EPF(o)/EPR/EWP(j)/EWA(c) Po-4/Pr-4/Pe-4 RPL WA/JW/RM  
 ACCESSION NR: AP5007155 S/0286/65/000/003/0024/0024

AUTHOR: Kazarnovskiy, Ya. S.; Aleynov, D. P.; Lapidus, A. S.

TITLE: A method for producing acetylene. Class 12, No. 167863 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 3, 1965, 24

TOPIC TAGS: acetylene, methane, pyrolysis, gas generation system

ABSTRACT: This Author's Certificate introduces a method for producing acetylene by heat oxidation pyrolysis of methane at a temperature of 1500-1600°C and a pressure of 2-6 atm. The raw material is preheated to 400-500°C and the pyrolytic gas is water-cooled to a temperature lower than 200°C. In order to increase the acetylene yield and to eliminate ash formation, circulating hydrogen is added to the raw material in quantities from 1 to 40% of the volume of the original mixture.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza (State Design and Planning Scientific Research Institute of the Nitrogen Industry and Products of Organic Synthesis)

Card 1/2

L 41157-65  
ACCESSION NR: AP5007155

SUBMITTED: 20Mar64

ENCL: 00

SUB CODE: FP, CC

NO REF SOV: 000

OTHER: 000

*ps*  
Card 2/2



L 59232-65 ENG(j)/EWP(e)/ENT(m)/EPF(c)/ENP(i)/EPR/ENP(j)/T/ENP(b) Pc-l/Pr-l/Ps-l

WH/RM/WH

ACCESSION NR: AP5016889

UR/0374/65/000/003/0107/0114

678:620.178.18

36  
34  
D

AUTHOR: Lapidus, A.S. (Moscow)

TITLE: An estimate of the wear resistance of plastics to polishing paper

SOURCE: Mekhanika polimerov, no. 3, 1965, 107-114

TOPIC TAGS: abrasive wear, plastic wear resistance, polishing paper, polycaprolactam, cast polyamide, textolite, durability measurement

ABSTRACT: The relative wear resistance of plastics to polishing paper offers an important criterion for the selection of plastics used in various machines, in particular for metal-cutting machine guides working under conditions generating high abrasive wear. The author describes a special device developed for the above-mentioned wear tests, outlines the experimental procedures, and lists experimental results for 55 plastics or plastic combinations. The results show that: 1) the relative wear resistance  $\xi$  of the tested plastics is within 0.27 and 5.8, the best value belonging to polycaprolactam B; 2) polyamide /  $\Delta$  samples cast under pressure exhibit a decrease in wear resistance with an increase in thickness; 3) an increase in the viscosity of the resin enhances its wear resistance; 4) the wear resistance of polyamide 68, cast into open molds, is significantly smaller than

Card 1/2

L 59232-65

ACCESSION NR: AP5016889

2  
for samples produced under pressure; 5) changes in the relative orientation of the friction velocity vector and the filler layer direction may affect the wear resistance of various materials to a significant degree; 6) the introduction of graphite or molybdenum disulfide into textolite and the type of fabric within the textolite does not markedly affect its wear; and 7) the best wear resistant properties are encountered in plastics which are simultaneously very strong (resistant to elongation) and viscous. Orig. art. has: 2 formulas, 5 figures, and 1 table.

ASSOCIATION: None

SUBMITTED: 12Oct64

ENCL: 00

SUB CODE: MT

NO REF SOV: 006

OTHER: 000

Card

dm  
2/2

ALIPOV, N.Ye.; LAPIDUS, A.S.

Determining the optimal heat-engineering characteristics of radiational-convection gas heaters. Gaz.prom. 10 no.5:29-33 '65.

(MIRA 18:6)

LAPIDUS, A.S.; CHIZHOV, B.N.

Causes of seizing on the feed guides of machine tools and methods for  
its prevention. Stan. 1 instr. 36 no.5:22-25 My '65. (MIRA 18:5)

L 15015-66 EWT(d)/EWT(m)/EWA(a)/EWP(v)/EWP(j)/T/EWP(t)/EWP(k)/EWP(h)/EWP(l)

ACC NR: AT6008953

IJP(c)

SD/DJ/GS/RM

SOURCE CODE: UR/0000/65/000/000/0138/0148

AUTHOR: Lapidus, A. S.

ORG: none

TITLE: Use of plastic guides in machines

SOURCE: Moscow, Institut mashinovedeniya. Plastmassy v podshipnikakh skol'zheniya; issledovaniya, opyt primeneniya (Plastics in friction bearings; research and experiment in application). Moscow, Izd-vo Nauka, 1965, 138-148

TOPIC TAGS: caprone, polyamide, antifriction material, aluminum alloy, steel, bronze, zinc alloy /  $\phi$ TsS6-6-3 bronze, TsAM10-5 zinc alloy, TsAM30-4 zinc alloy, PT textolite, 45 steel alloy, B-16 babbitt, NRE-150 grinding belt, I-1 test stand, polyamide 68, SCh21-40 cast iron, S $\phi$ S6-6 babbitt

ABSTRACT: The use of plastic guides, V-slots, T-slots, etc. in machines is discussed qualitatively and (to a limited extent) quantitatively. After a brief review of the history and present practice of using plastic guides, some experiments which form an extension of the author's previous work (Nakladnyye napravlyayushchiye iz plastmass dlya stankov.-Stanki i instrument, 1955, No. 11

Card 1/2

L 15015-66

ACC NR: AT6008953

16  
i 12) are described qualitatively. These include sliding tests of various plastics on lubricated and unlubricated surfaces and grinding belts (NRE 150). No data are given except the statement that caprone B and polyamide 68<sup>15</sup> performed best. The results of a lengthy investigation of plastic guides on medium-sized machines by A. S. Lapidus and E. A. Mayorova (Primeneniye nakladnykh napravlyayushchikh iz kaprona v stankakh. Rukovodyashchiye materialy. ENIMS, 1963) are presented in an abbreviated table and are discussed. Curves of the friction coefficient as a function of speed and of the coefficient of contact as a function of loading are shown for a number of materials sliding on Sch21-40<sup>18</sup> cast iron. These include bronze OTsS6-6-3,<sup>18</sup> zinc alloys TsAM10-5<sup>18</sup> and TsAM30-4,<sup>18</sup> steel 45, textolite PT, babbitt B16 and SOS6-6,<sup>18</sup> caprone B, polyamide 68, AK-7,<sup>18</sup> teflon, and aluminum alloy ASM<sup>18</sup>. Orig. art. has: 6 figures and 1 table.

SUB CODE 11, 13/<sup>18</sup> SUBM DATE: 31Jul65/<sup>18</sup> ORIG REF: 004

Card 2/2 90

VOLKOV, Abram Yefimovich; LAPIDUS, Aleksandr Semenovich; BRANDT,  
B.B.; red.

[Safety measures in the production of acetylene from  
natural gas] Tekhnika bezopasnosti v proizvodstve atse-  
tilena iz prirodnogo gaza. Moskva, Izd-vo "Khimiia,"  
1964. 148 p. (MIRA 17:5)

LAPIDUS, B.V.; POLTAVSKIY, V.T.; RYBAK, G.D.; OSHEROVICH, M.D.;  
KANAATOV, S.; GELEVEY, A.M.; KUDINA, Z.A.; STANKEVICH,  
M.P.; PRITULYAK, O.M.

[National economy of the Kirghiz S.S.R. in 1963; a statistical yearbook] Narodnoe khoziaistvo Kirgizskoi SSR v 1963 godu; statisticheskii ezhegodnik. Frunze, Statistika, 1964. 237 p. (MIRA 18:6)

1. Tsentral'noye statisticheskoye upravleniye pri Sovete Ministrov Kirgizskoy SSR.



*LAPIDUS, E.S.*

137-58-5-11151

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 322 (USSR)

AUTHORS: Nechayeva, Ye.A., Lapidus, E.S.

TITLE: Photocolorimetric Determination of Phosphorus in Refractory Steels (Fotokolorimetricheskoye opredeleniye fosfora v zharopornyykh stalyakh)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii. Ukr. resp. pravl., 1956, Vol 4, pp 108-109. Comments p 110

ABSTRACT: Bibliographic entry. Ref. RzhMet, 1956, Nr 10, abstract 11436

1. Phosphorus--Determination    2. Steel--Analysis    3. Colorimetry  
--Applications

Card 1/1

3346. Photocolorimetric determination of phosphorus in heat-resisting steels. E. A. Nechnaeva and E. S. Lapidus (Petrov Dnepropetrovsk Metall. Works), *Zavodsk. Lab.*, 1958, 23 (4), 418. The method is suitable for determining P in the presence of Cr. The sample of steel (0.2 g) is dissolved in HCl and  $\text{HNO}_3$ , 3 ml of conc.  $\text{H}_2\text{SO}_4$  are added and the soln. is evaporated to fuming. After the addition of 40 ml of hot water the soln. is filtered, the residue is washed with hot water and the filtrate, diluted to 250 ml, is boiled and treated with 5 ml of 0.5 per cent.  $\text{CoSO}_4$  or  $\text{Co}(\text{NO}_3)_2$  soln. and 20 ml of 20 per cent.  $(\text{NH}_4)_2\text{S}_2\text{O}_8$  soln. Heating is continued to give a pink colour, due to  $\text{MnO}_4^-$ , which is destroyed by addition of two drops of 50% HCl (1 + 1), and aq.  $\text{NH}_3$  is added to precipitate Fe as hydroxide and phosphate. The ppt. is filtered off and after being washed is rinsed back into the original beaker. Traces of ppt. on the paper are dissolved in 2 to 3 ml of hot dil. HCl (1 + 1) and washed into the beaker. The soln. is evaporated if necessary and diluted to 50 ml in a calibrated flask. The normal photocolorimetric method for P in steel is then applied to 25 ml of this soln.

G. S. Suvorov

5(2)

AUTHORS:

Nechayeva, Ye. A., Lapidus, E. S.

SOV/32-25-5-5/56

TITLE:

Complexometric Determination of the Sum of Titanium and Aluminum in Clay and Chamotte (Kompleksometricheskoye opredeleniye summy titana i alyuminiya v glinakh i shamotakh)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 5, pp 544-545 (USSR)

ABSTRACT:

An accelerated trilonometric method, in which a prior separation of silicic acid is no more required, was worked out for the determination of the sum  $TiO_2 - Al_2O_3$  in clay and chamotte. Publications give the description of several variants of volumetric determinations of Fe, Al and Ti, on the basis of complex compounds forming with Trilon B at pH = 5 - 6.7. In this connection, excess Trilon B is titrated with zinc acetate, and the amount of Trilon B required for the complex formation is thus determined. The end of titration is determined by an oxidation of benzidine with potassium ferricyanide under formation of benzidine blue. Alkaline-earth metals do not react with Trilon B at pH = 5 - 6.7, while the addition of sodium

Card 1/2

Complexometric Determination of the Sum of Titanium  
and Aluminum in Clay and Chamotte

SOV/32-25-5-5/56

fluoride to the solution of Fe-, Al- and Ti complexes effects the precipitation of the two last mentioned substances. The Trilon B amount freed in this connection is equivalent as to the content of Al and Ti, and may be titrated with zinc acetate. The method was tested on salt solutions of the abovementioned metals (Table 1). When determining the sum  $Al_2O_3 + TiO_2$  in chamotte the results obtained are somewhat lower, but still within admissible error limits, as may be seen from the analytical results given for a few such samples (Table 2). Moreover, more than 50 clay and chamotte samples supplied evidence of the greater accuracy of the analytical method described, as compared with the gravimetric method according to GOST. The course of the analysis is described. There are 2 tables and 1 Soviet reference.

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy zavod im. Petrovskogo  
(Dnepropetrovsk Metallurgical Works imeni Petrovskiy)

Card 2/2

LAPIDUS, E. Ya.

Anesthesia of the pulp. Stomatologiya 42 no.4:29-31 J1-Ag'63  
(MIRA 17:4)

1. Iz 9-y stomatologicheskoy polikliniki (glavnyy vrach G.A.  
Yevsyukova), Moskva.

LAPIDUS, F. I.

Roentgenologic manifestations of tumors of the parotid gland. Stomatologiia, Moskva no.2:40-42 1951. (CML 20:11)

1. Candidate Medical Sciences. 2. Of Kiev Roentgen-Radio-Oncological Institute (Director -- Docent I. T. Shevchenko).

LAPIDUS, F.I., kandidat meditsinskikh nauk

Case of neurofibromatosis with calcinosis of the soft tissue.  
Vest.rent. 1 rad. no.3:93-97 My-Je '55. (MLRA 8:10)

1. Iz diagnosticheskogo otdeleniya (zav. V. Yu. Aruchgazyev)  
Kiyevskogo rentgeno-radioonkologicheskogo instituta (dir.  
doktor meditsinskikh nauk prof. I.T.Shevchenko)  
(NEUROFIBROMATOSIS, complications,  
calcinosis)  
(CALCINOSIS, complications,  
neurofibromatosis)

IAPIDUS, F.I., kandidat meditsinskikh nauk

Importance of X-ray examinations in diagnosing epulis. Stomatologiya  
35 no.5:27-31 S-O '56 (MIRA 10:4)

1. Iz diagnosticheskogo otdeleniya (zav.-kandidat meditsinskikh nauk  
V.Yu. Arungazyyev) Kiyevskogo rentgeno-radio-onkologicheskogo  
instituta (dir.-doktor meditsinskikh nauk I.T. Shevchenko)  
(MOUTH--TUMORS) (GUMS--RADIOGRAPHY)



LAPIDUS, F.I.

Features of the picture of reticulosarcoma of the jaw in children.  
Vop. onk. 5 no.12:692-697 '59. (MIRA 13:12)  
(JAWS—TUMORS)

LAPIDUS, F.I., kand.med.nauk

On a particular form of osteodystrophy of the mandible. Vest.rent. i  
rad. 34 no.4:75-79 J1-Ag '59. (MIRA 12:12)

1. Iz Kiyevskogo rentgeno-radiologicheskogo i onkologicheskogo insti-  
tuta (dir. - doktor med.nauk prof. I.T. Shevchenko).  
(MANDIBLE dis.)

LAPIDUS, F. I. Doc Med Sci -- "Layer X-ray examination of the maxillofacial region." Kuybyshev, 1960 (Kuybyshev Med Inst). (KL, 1-61, 205)

-345-

LAPIDUS, F.I.; POZMOGOV, A.I.[Pozmogov, O.I.], red.; GITSHTYIN, A.D.  
[Hitshtein, O.D.], tekhn. red.

[Tomography of the maxillofacial region] Posharove rentgeno-  
logichne doslidzhennia shchelepno-lytsovoi dilianky. Kyiv,  
Derzh. med. vyd-vo URSR, 1961. 177 p. (MIRA 15:3)  
(Jaws---Radiography) (Face---Radiography)

LAPIDUS, F.I., starshiy nauchnyy sotrudnik; GANINA, K.P., starshiy nauchnyy sotrudnik; SHEREMET-SHCERBAK, N.G., starshiy nauchnyy sotrudnik

Malignant tumors of the nasal cavity and the paranasal sinuses and the diseases which precede them. Zhur. ush., nos. i gorl. bol. 21 no.3:19-23 My-Je '61. (MIRA 14:6)

1. Kiyevskiy nauchno-issledovatel'skiy rentgeno-radiologicheskii i onkologicheskii institut (nauchnyy rukovoditel' - prof. I.T. Shevchenko).

(NOSE, ACCESSORY SINUSES OF—CANCER)

L 33321-65 EWT(m)/EPF(c)/EPF(n)-2/ENP(t)/ENP(b) Pr-h/Pi-h/Pu-h IJP(c) RWH/JD/RM  
 ACCESSION NR: AP5004357 S/0076/65/039/001/0161/0165

AUTHORS: Nisel'son, L. A.; Lapidus, I. I.

TITLE: Liquid-vapor equilibrium in systems formed by silicon tetrachloride and  
 silicane trichloride with dibutyl ether and some additives

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 1, 1965, 161-165

TOPIC TAGS: equilibrium condition, silicon tetrachloride, silicane trichloride,  
 dibutyl ether

ABSTRACT: Experiments were performed on equilibria between liquids and vapors  
 in systems formed by  $\text{SiCl}_4$  and  $\text{SiHCl}_3$  with dibutyl ether and some added chlorides.  
 Graphs show the dependence of the logarithms of vapor pressures on the inverse

Cord 1/2

I 33321-65

ACCESSION NR: AP5004357

$\text{PCl}_3$ ,  $\text{POCl}_3$ ,  $\text{BCl}_3$ ,  $\text{TiCl}_3$  (in the presence of dibutyl ether and without it). After adding dibutyl ether to  $\text{SiCl}_4$ , the volatility in the presence of  $\text{PCl}_3$  increased from 1.16 to 2.82. in the presence of  $\text{BCl}_3$ , from 0.27 to 1.84. No increase of

ASSOCIATION: Giredmet

SUBMITTED: 25Jan64

ENCL: 00

SUB CODE: GC

NO REF SOV: 009

OTHER: 003

Card 2/2



NISEL'SON, L.A.; LAPIDUS, I.I.

Liquid - vapor equilibrium in the systems formed by  $\text{SiCl}_4$  and  $\text{SiCl}_3$  with diisopropyl ether and some impurities. Zhur.fiz.khim. 39 no.7:1756-1759 J1 '65. (MIRA 18:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskey promyshlennosti.

L 36186-66 EWT(m)/EWP(j) RM

ACC NR: AP6010746

SOURCE CODE: UR/0076/66/040/003/0637/0640

AUTHOR: Lapidus, I. I.; Nisel'son, L. A.ORG: GiredmetTITLE: Liquid-vapor equilibrium<sup>1</sup> in systems formed by trichlorosilane<sup>1</sup> with dipropyl, diamyl, and diisoamyl ether<sup>1</sup>

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 3, 1966, 637-640

TOPIC TAGS: silane, ether, vapor pressure, phase equilibrium

ABSTRACT: The liquid-vapor equilibrium in binary systems<sup>1</sup> formed by trichlorosilane with dipropyl, diamyl, and diisoamyl ether was studied by determining the boiling points of the mixtures as functions of pressure, then treating the data in the form of equations of the type  $\log p = A - B/T$ . The activity coefficients of the components, heats of vaporization, compositions of the vapor phase, and relative volatility as functions of the composition of the liquid phase were calculated. Negative deviations from ideality were observed in the three systems. The relative volatility in the systems  $\text{SiHCl}_3$  - dipropyl ether,  $\text{SiHCl}_3$  - diamyl ether, and  $\text{SiHCl}_3$  - diisoamyl ether on passing from the pure ether to pure trichlorosilane increases from 2 to 7, from 12 to 340, and from 8.3 to 368 respectively. The effect of the ethers on the relative volatility  $\alpha_{\text{SiHCl}_3/\text{admixture}}$  was experimentally determined for chloride admixtures in the concentration range of  $10^{-5}$ - $10^{-3}\%$ . A decrease of  $\alpha_{\text{SiHCl}_3/\text{PCl}_3}$  and

Card 1/2

UDC: 541.123

L 36186-66

ACC NR: AP6010746

increase of  $\alpha\text{SiHCl}_3/\text{POCl}_3$  upon addition of diamyl and diisoamyl ether and a decrease of  $\alpha\text{SiHCl}_3/\text{POCl}_3$  upon addition of dipropyl ether were observed. Diisoamyl ether, which forms with trichlorosilane a system with an appreciable negative deviation from ideality, was found to have a comparatively substantial influence on  $\alpha\text{SiHCl}_3$ /admixture. Orig. art. has: 3 figures and 4 tables.

SUB CODE: 07/ SUBM DATE: 18Jan65/ ORIG REF: 001

Card

2/2 *MLR*

L 45897-66 EWT(m)/EWP(1)/T DS/JW/RM

ACC NR: AP6026426

(A)

SOURCE CODE: UR/0079/66/036/005/0773/0776

AUTHOR: Lapidus, I. I.; Nisel'son, L. A.; Karateyeva, A. A.ORG: State Scientific Research and Planning Institute of the Rare Metal Industry  
"Giredmet" (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redko-metallicheskooy promyshlennosti "Giredmet")TITLE: Liquid-vapor equilibrium in systems formed by trichlorosilane and tetrachlorosilane with certain nitriles

SOURCE: Zhurnal obshchey khimii, v. 36, no. 5, 1966, 773-776

TOPIC TAGS: phase equilibrium, silane, acetonitrile, organic nitrile compound

ABSTRACT: In a study of the liquid-vapor equilibrium in systems formed by trichlorosilane and tetrachlorosilane with acetonitrile and benzonitrile, the experimental relationships between the boiling points and pressures were treated by the least-squares method and represented by equations of the form  $\log P = A - \frac{B}{T}$ . From the experimentaldata, the activity coefficients, composition of the equilibrium vapor, relative volatility, and molar heat of vaporization were calculated as functions of the composition of the liquid phase. Positive deviations from ideality were established in the systems tetrachlorosilane-acetonitrile and trichlorosilane-acetonitrile. The effect of adding 2% acetonitrile or benzonitrile on the relative volatility of  $PCl_3$ ,  $POCl_3$ , and

Card 1/2

UDC: 541.127

I 45897-66

ACC NR: AP6026426

BCl<sub>3</sub> in tetrachlorosilane and trichlorosilane was studied. The nitriles were found to be effective in promoting the removal of BCl<sub>3</sub> impurity from SiCl<sub>4</sub> and SiHCl<sub>3</sub> by fractional distillation by converting BCl<sub>3</sub> into a much less volatile form than the substances being purified. The separation of PCl<sub>3</sub> and POCl<sub>3</sub> from SiCl<sub>4</sub> and SiHCl<sub>3</sub>, on the other hand, becomes much more difficult in the presence of acetonitrile and benzonitrile. Orig. art. has: 2 figures and 3 tables.

SUB CODE: 07/ SUBM DATE: 22May65/ ORIG REF: 005/ OTH REF: 005

Card

2/2 *mt*

L 45905-66 EWT(m)/T DS

ACC NR: AP6026151

SOURCE CODE: UR/0076/66/040/007/1630/1631

AUTHOR: Lapidus, I. I.; Nisel'son, L. A.; Karatayeva, A. A.

ORG: State Scientific Research Institute of the Rare Metal Industry (Gosudarstvennyy nauchno-issledovatel'skiy institut redkometallicheskey promyshlennosti)

TITLE: Liquid-vapor equilibrium in the  $\text{SiHCl}_3\text{-PCl}_3$  system

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 7, 1966, 1630-1631

TOPIC TAGS: silane, phosphorus chloride, phase equilibrium, vapor pressure

ABSTRACT: The relationships between the boiling points and the pressure were determined for mixtures of trichlorosilane and phosphorus trichloride. The data obtained were treated by the least-squares method and are represented by equations of the form  $\log p = A - B/T$ . From this experimentally established dependence of the boiling points on the composition at 760 mm Hg, the activity coefficients of the components, composition of the equilibrium vapor, and relative volatility were calculated as functions of the composition of the liquid phase. Slight negative deviations from Raoult's law were found in the system. As the composition of the mixture changes from pure phosphorus trichloride to pure trichlorosilane, the relative volatility increases from 2.9 to 4.6. Orig. art. has: 2 tables.

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Card 1/1 mis

UDC: 541.123

LAPIDES, I.L.

Possibility of the existence of regions with dense neutrino concentration. Zhur. eksp. i teor. fiz. 47 no.3:964-965 S '64.  
(MIRA 17:11)

PETROCHENKO, Petr Fedorovich; BUDARINA, V., red.; LAPIDUS, L.,  
mladshiy red.; KORNILOVA, V., tekhn. red.

[Establishing work norms in the U.S.S.R.] Normirovanie truda v SSSR. Moskva, Izd-vo "Mysl'," 1964. 351 p.  
(MIRA 17:3)



LOFYREV, Nikolay Kirillovich; BUDARINA, V., red.; LAPIDUS, L.,  
mlad. red.

[Development of the theory of labor productivity] Razvitie  
teorii proizvoditel'nosti truda. Moskva, Mysl', 1965. 191 p.  
(MIRA 18:9)

SOSNIN, Mikhail Yakovlevich; BUDARINA, V., red.; LAPIDUS, L.,  
mlad. red.

[Current problems of using the labor force in the U.S.S.R.]  
Aktual'nye problemy ispol'zovaniia rabochei sily v SSSR.  
Moskva, Izd-vo "Mysl'," 1965. 302 p. (MIRA 18:2)

KAZNADZEY, N.F.; LAPIDUS, L.A.

Accounting for cocoons by their conditioned weight. Tekst. prom.  
17 no.8:53-54 Ag '57. (MIRA 10:9)  
(Silk manufacture--Accounting)

15(4)

AUTHORS:

06375  
Arifov, U.A., Kley, G.A., Pashinskiy, S.Z., SOV/166-59-5-2/9  
Lapidus, L.A., Anastasov, S.A., Zaurov, R.I.,  
and Kordub, N.V.

TITLE:

The Investigation of the Method of  $\gamma$ -Rays for the Pickling and  
Conservation of the Chrysalises of the Silkworm

PERIODICAL:

Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-  
matematicheskikh nauk, 1959, Nr 5, pp 12-17 (USSR)

ABSTRACT:

The paper is a continuation of [Ref 1,2,3]. For a great number  
(700 kg) of living chrysalises the authors investigate the  
effect of a  $\gamma$ -irradiation on the quality of the chrysalises  
and the raw silk obtained out of them. It is stated: 1. The  
chrysalises irradiated with  $\gamma$ -rays  $Co^{60}$  yield more raw silk  
than chrysalises submitted to hot air. 2. During the spooling  
the silk thread tears seldom, the mean length of the thread is  
larger. 3. Mildewing during the conservation is seldom, it  
appears by the humidity separated by the chrysalises. 4. A  
complete elimination of the mold is only possible if the moisture

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ARIFOV, U.A.; KLEYN, G.A.; OKUN', G.S.; LAPIDUS, L.A.; PASHINSKIY, S.Z.;  
KIM, G.S.

Physical and mechanical properties of silk and fabrics manu-  
factured from cocoons killed by gamma rays. Izv. AN Uz. SSSR.  
Ser. fiz. mat.nauk 6 no.2:59-66 '62. (MIRA 15:9)

1. Akademiya nauk UzSSR.  
(Sericulture) (Gamma rays--Industrial applications)

LAPID<sup>4</sup>30, L.G.

BARYKIN, Aleksey Mikhaylovich; LAPIDUS, Lev Grigor'yevich; LOSEVA, Nina Leonidovna; TORMOZOVA, L.I., redaktor; NOVIKOV, Ye.M., inzhener, retsenzent; PETISKINA, Ye.I., inzhener, retsenzent; STEFANOVICH, I.P., kandidat tekhnicheskikh nauk, redaktor; EL'KINA, Ye.M., tekhnicheskii redaktor

[Technology of processing fur] Tekhnologiya izdelii iz mekha.  
Moskva, Gos.nauchno-tekhn.izd-vo Ministerstva tekstil'noi promyshl. SSSR, 1955. 285 p. (MLRA 9:4)  
(Fur)

LAPIDUS, L.G.

ZUBIN, A.M., kand.biolog.nauk; KUZNETSOV, B.A., prof., doktor biolog. nauk; MOSEKOV, A.N., kand.sel'skokhoz.nauk; PURIM, Ya.A., kand. tekhn.nauk; CHATSKIY, P.I., kand.tekhn.nauk; SERGEYEVA, T.A., kand.tekhn.nauk; BARYKIN, A.M., kand.tekhn.nauk; LOSEVA, N.L., kand.tekhn.nauk [deceased]; RUMYANTSEV, M.Z., starshiy nauchnyy sotrudnik [deceased]; LAPIDUS, L.G., starshiy nauchnyy sotrudnik; FRENKEL', Ye.B., kand.tekhn.nauk; KHMEL'NITSKAYA, Ye.G., mladshiy nauchnyy sotrudnik; KATAYEV, V.P., kand.ekonom.nauk; KLYAGINA, N.I., red.; MARTYNOV, S.F., red.; MINAYEVA, T.M., red.; PLEMYANNIKOV, M.N., red.; KNAKHIN, M.T., tekhn.red.

[Manual on fur and sheep pelt garment manufacture] Spravochnik po mekhovoi i ovchinno-shubnoi promyshlennosti. Vol.2.[Raw materials. Semifinished and final products. Production technology] Syr'e. Polufabrikaty i izdeliia. Tekhnologiya proizvodstva. 1959. 631 p. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut mekhovoy promyshlennosti (NIIMP) (for Rumyantsev, Lapidus).

(Hides and skins) (Fur--Handbooks, manuals, etc.)

LAPIDUS, L.G.

Investigating gluing methods for strengthening the cuts of  
spring furs. Kozh.-obuv.prom. 2 no.7:31-33 J1 '60.  
(MIRA 13:8)

(Fur)

(Gluing)



SMULEVICH, Boleslav Yakovlevich, doktor med. nauk, kand. ekon. nauk;  
EUDARTINA, V., red.; LAPIDUS, L., mlad. red.

[National health and sociology] Narodnoe zdorov'e i  
sotsiologiya. Moskva, Mysl', 1965. 230 p. (MIRA 18:5)

L 63468-65 EWT(m)/EPP(c)/EWP(j)/T DS/WW/JW/RM

ACCESSION NR: AP5019795

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20  
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AUTHOR: Nisel'son, L. A.; Lapidus, I. I.

TITLE: Liquid-vapor equilibrium in systems formed by  $\text{SiCl}_4$  and  $\text{SiHCl}_3$  with diisopropyl ether and certain impurities

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 7, 1965, 1756-1759

TOPIC TAGS: tetrachlorosilane, trichlorosilane, vapor pressure, diisopropyl ether

ABSTRACT: A study of the  $\text{SiCl}_4$ -diisopropyl ether binary system revealed substantial positive deviations from Raoult's law. As the composition changes from pure ether to pure  $\text{SiCl}_4$ , the relative volatility decreases from 2.6 to 1.15; this has an unfavorable effect on the regeneration of diisopropyl ether from its mixtures with  $\text{SiCl}_4$ . No deviations from Raoult's law were found in the  $\text{SiHCl}_3$ -diisopropyl ether system; the system is ideal. Treatment of ebulliometric data for both systems yielded values for the constants of the equation  $\log p = A + B/T$ , which are tabulated. The effect of the addition of 2% diisopropyl ether on the relative volatility of impurities present in  $\text{SiHCl}_3$  and  $\text{SiCl}_4$  was studied. It was shown that a changes most ap-

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precipally in systems formed by  $\text{SiCl}_4$  and  $\text{SiHCl}_3$  with  $\text{BCl}_3$  and  $\text{TiCl}_4$ ;  $\alpha_{\text{SiCl}_4/\text{BCl}_3}$  and  $\alpha_{\text{SiCl}_4/\text{TiCl}_4}$  change respectively from 0.27 to 1.46 and from 10.1 to 14.9; whereas  $\alpha_{\text{SiHCl}_3/\text{BCl}_3}$  and  $\alpha_{\text{SiHCl}_3/\text{TiCl}_4}$  change respectively from 0.68 to 1.72 and from 15.4 to 52.9. The relative volatilities in the systems of investigated silicon chlorides with  $\text{PCl}_3$  and  $\text{POCl}_3$  change only slightly, with the exception of a decrease in  $\alpha_{\text{SiHCl}_3/\text{POCl}_3}$  from 2.92 to 1.36. Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut red-kometallicheskooy promyshlennosti (State Scientific Research and Planning Institute of the Rare Metal Industry)

SUBMITTED: 18Apr64

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Card 2/2

SCHWINGER, J.; KLEPIKOV, N.P. [translator]; LAPIDUS, L.I. [translator];  
MAYKOVA, Ye.I., redaktor; IOVIEVA, N.A., tekhnicheskyy redaktor

[The theory of quantized fields. Translated from the English] Teoriya  
kvantovannykh polei. Perevod s angliiskogo N.P.Klepikova i L.I.  
Lapidusa, Moskva, Izd-vo inostrannoi lit-ry, 1956. 252 p. (MLBA 10:1)  
(Quantum theory)

LAPIDUS, L.I.

SUBJECT USSR / PHYSICS CARD 1 / 8 PA - 1453  
 AUTHOR BIRJUKOV, V.A., GOLOVIN, B.M., LAPIDUS, L.I.  
 TITLE The All-Soviet Conference on the Physics of Particles with High  
 Energies.  
 PERIODICAL Atomnaja Energija, 1, fasc.4, 158-165 (1956)  
 Issued: 10 / 1956 reviewed: 10 / 1956

This conference was held by the Department for Physical and Mathematical Sciences of the Academy of Science in the USSR at Moscow with the participation of more than 1000 engineers and physicists of many laboratories and institutes of the Soviet Union and about 60 foreign scientists. The conference began its work on May 14th with a plenary session. On this occasion M.G. MEŠČERJAKOV stressed the necessity of the cooperation of scientists of various countries in working out the most important problems of the physics of elementary particles.

The first lecture was delivered by A.L. MING on the construction, the most important data, and the experience made with the operation of the synchrocyclotron of the Institute for Nuclear Problems which had recently been transferred to the United Institute for Nuclear Research. This accelerator, the magnetic poles of which had a diameter of 5 m, was put into operation in 1949 after a short period of construction. It was used for the acceleration of deuterons and  $\alpha$ -particles, and in 1950 500 MeV protons were obtained. By reconstruction (1953) the diameter of the magnetic poles was increased to 6 m and proton energy to 680 m.

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V.I. VEKSLER gave a report on the synchrophasotron for 10-BeV-protons of the electrophysical Institute. Also this apparatus has been transferred to the United Institute, being destined for the investigation of the nature of nuclear forces, the properties of mesons, hyperons, antiprotons, etc. V.V.VLADIMIRSKIJ reported on projected proton synchrotrons for 6-7 BeV and 50-60 BeV with hard focussing. Such devices are not yet in operation but are already under construction, above all in the USSR, in the USA, and in Switzerland. The meeting was closed after a lecture delivered by J. (or G. ?) MARSHALL (USA) on the project of building a proton synchrotron for 15 BeV.

In the course of the following days the conference carried out its work in 3 sections: 1.) Elementary particles and their interactions. 2.) Accelerators for elementary particles. 3.) Theoretical work concerning the physics of particles of high energy.

The first meeting of the department "Accelerators" was devoted to the problem of accelerators of the cyclotron type. At first V.P.DMITRIEVSKIJ and V.I.DANILOV delivered a report on the work performed by the Institute for Nuclear Problems in connection with the releasing of the bundle from the 6 m - synchrocyclotron and on the increase of the density of the released proton bundle. CH. TIREN (Sweden) delivered a report on a subterranean synchrocyclotron for 185 MeV. I.CH.NEVAŽSKIJ dealt with some special features of the high frequency system of the six meter phasotron, and Prof. BAKER spoke about the system of frequency modulation of the Swiss 600 MeV synchrocyclotron.

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Other lectures dealt with individual lectures delivered on the theory of the motion of particles in accelerators. In the course of the two following meetings of the department for accelerators, M.S.RABINOVIC, E.G.KOMAR, S.M.RUBCINSKIJ, I.F.MALYSEV, N.A.MONOSZON and others reported on the physical bases of the 10 BeV synchrocyclotron and on its individual components.

Many interesting lectures were delivered in the course of meetings concerning electron accelerators. V.D.RUSANOV, JU.N.LOBANOV and M.SEIDL (the latter from Czechoslovakia) spoke about experimental investigations of the capture of electrons on the occasion of a betatron-like operation of the accelerators, and, besides, several problems connected with the motion of electrons in the accelerators were dealt with.

In a special meeting the special features and the economic coefficients of linear accelerators were dealt with by Soviet and foreign specialists. Furthermore, also the accelerators with hard focussing were dealt with in the course of this session. Prof. REGENSTREIF (Geneva) gave a report on the 25-BeV synchrotron under construction in Geneva.

Special attention was attracted by lectures on new methods of acceleration. M.OLIPHANT (Australia) gave a report on the construction of the first proton synchrotron for 10 BeV, in which the strong magnetic fields (of up to 80.000 oersted) are generated without the help of iron nuclei. G.I.BUDKER lectured on the generation of large magnetic fields and on the original idea of producing a closed stabilized electron bundle. A.A.KOLOMENSKIJ spoke about the

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construction of annular accelerators with constant circulation frequency of the particles.

The last session of this department was devoted to the study of various experimental methods.

Department of "Elementary Particles and their Interaction". The first session dealt with problems connected with the production of pions by nucleons. Reports were delivered by M.G.MEŠČERJAKOV et al. on the study of the spectra of pions, nucleons and deuterons created on the occasion of (pp)-collisions and of the bombardment of Be-nuclei with protons, L.RIDDIFORD (England) dealt with the (pp)-interaction at 650 MeV, JU.D.BAJUKOV et al. on the production of  $\pi^0$ -mesons on the occasion of collisions of protons and neutrons of high energy with protons, deuterons, and with nuclei of different elements, P.MARSHAK (USA) on some results obtained by tests concerning the production of pions on a nucleus with the isotopic spin zero, ( $\text{Li}^6$ ), L.SMITH (USA) on the interaction between protons and protons within the energy range 1 to 3 BeV, S.Z.BELEN'KIJ on the interaction between mesons and nucleons, E. SEGRÉ on the interaction between mesons and nucleons, and on the discovery of the antiproton. (According to I.JA.POMERANČUK (who spoke in the discussion), a system consisting only of protons is produced on the occasion of the annihilation of antiprotons on the nucleons). JA.A.SMORODINSKIJ spoke about the scattering of nucleons by nucleons (survey of experimental data), O.CHAMBERLAIN (USA) on the scattering of polarized protons, and V.P.DŽELEPOV on (n,p) and (n,n) scattering at a neutron energy of from 580 to 590 MeV,



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L.I.LAPIDUS on new possibilities of the phase analysis of the data of (n,p)-scattering, P.MARSHAK (USA), E.KLEMENTEL (?) (Italy) and L.RIDDIFORD (England) on the elastic scattering of protons and neutrons by neutrons, various authors dealt with the scattering of nucleons, particularly with (p,p) scattering at 660 MeV and from 1 to 3 BeV.

A further session devoted its attention to the interaction of pions with nucleons and nuclei. Further problems were dealt with by the following authors: N.A.MITIN and I.V.SOKOLOVA: the scattering of  $\pi^+$ -mesons by nucleons and the phase analysis of this process, E.KLEMENTEL (?) (Italy): the same problem, P.MARSHAK: the scattering of pions with low energy by protons, K.BRJUKNER (BRUECKNER ?): the total cross sections of the interaction of pions with nucleons at high energies, P.M.SULJAEV, N.I.PETROV and A.E.IGNATENKO: the interaction of  $\pi^-$ -mesons (330 MeV) with an  $\text{He}^4$ -nucleus, V.V.KRIVICKIJ: the production of  $\pi^-$ -mesons in carbon by 308 MeV- $\pi^-$ -mesons, G.D.STOLETOV: polarization on the occasion of the scattering of 660-MeV-protons by beryllium nuclei, P.MARSHAK: polarization on the occasion of the scattering of protons by protons, I.I.LEVINTOV: the determination of the ratio of the real parts of the spin-orbit- and of the central potential of the interaction between nucleons with nuclei, N.A. GULIEV: the polarization occurring on the occasion of the scattering of nucleons by nuclei, L.ROSENFELD (England): the possibilities offered by the nuclear scattering of fast particles to the study of nuclear structure, M.Levi: the scattering of 550-MeV electrons by protons and deuterons, V.I.MOSKALEV:

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measuring total cross sections and cross sections of the nonelastic scattering of neutrons and protons by nuclei, EL-NADI: the applicability of BORN'S approximation to such reactions in which the incident nucleon captures two nucleons of the nucleus, K.A.TER-MARTIOSJAN: the elastic and nonelastic scattering of neutrons and deuterons of high energy by longitudinal semi-transparent nuclei, N.A.PERFILOV: the emission of fragments with  $Z \geq 4$  on the occasion of the destruction of the cores of the emulsion by protons, J. (or G?) FILBER: the interaction of 1 BeV-protons with the nuclei of the photo emulsion, A.M.BALDIN: the problems connected with photonuclear reactions, N.G.SEMAŠKO: the photoproduction of slow pions on complicated nuclei, A.A.ABRIKOSOV: some quantum-electric effects at high energies, P.PANOVSKIJ (USA): the multiple photoproduction of pions in hydrogen, the photoproduction of myon couples, the direct production of mesons by electrons, and bremsstrahlung at high energies, B.M.PONTEKORVO: the tests undertaken for the discovery of a nuclear interaction connected with the exchange of meson pairs, N.B.DELONE, V.S.ROGANOV and P.WILSON (USA): various problems connected with the photo fission of the deuteron, M.I.ADAMOVIC: the photoproduction of pions on deuterons, A.N.GORBUNOV: experiments concerning the photospallation (photofission ?) of the helium nuclei at high energies. The last session of the department "Elementary Particles" dealt with the problem

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of new particles. The following topics were dealt with: A.I.ALICHANJAN: experiments undertaken with a mass spectrometer in connection with two WILSON chambers, V.A.LJUBIMOV: measuring the spectrum of K-mesons in an altitude of 3200 m, L.SMITH (SMITH): experiments carried out with a cosmotron in the course of which cases of a simultaneous production of  $\Lambda$  - and  $\Theta$ -particles were sought, WAN-GAN-CAN (Red China): the study of heavy mesons and hyperons at an altitude of 3185 m by means of a WILSON chamber, B.S.NEGANOV: the possibility of considering a nucleon as a system composed of a hyperon and a K-particle, G. STEINBERGER (USA): the production of "strange" particles by 1,3 MeV-pions in hydrogen, P.PEIERLS (England): "hypernuclei", i.e. nuclear systems containing bound hyperons, (N.N.KOLESNIKOV discussed similar problems in the theoretical department).

Theoretical Department: In the course of official and unofficial sessions (the latter were organized after the Conference had already begun) the following authors dealt with the following subjects: Soviet theoreticians and their foreign guests dealt with the works by L.D.LANDAU and his collaborators, quantum dynamics and the theory of fields, I.E.TAMM, I.JA.POMERANČUK, K.BRUKNER (BRUECKNER), M.LEVI: the present state of development of the meson theory, I.JA.POMERANČUK expressed his opinion that the consistent investigation of quantum electrodynamics and of the meson theory leads to the conclusion that the renormalized charge of the electron and the renormalized meson charge are equal to zero. This would enforce entirely new ideas. I.E.TAMM also stressed

LAPIDUS, L.I.

Development of research in the field of high-energy nuclear physics;  
all-Union conference in Moscow. Vest.AN SSSR 26 no.8:97-106 Ag '56.  
(Moscow--Nuclear reactions--Congresses) (MLRA 9:9)